

## REMARKS

Claims 1 - 12 remain active in this application. No new matter has been introduced into the application. The allowance of claims 1-5 is noted with appreciation.

In the response filed September 17, 2004, Applicant requested supervisory review under M.P.E.P. §707.02 because the prosecution of this application had become protracted. It does not appear in the most recent office action that supervisory review has occurred.

Although withdrawal of the previous ground of rejection of claims 6 and 7 under 35 U.S.C. §103 is noted, it is now noted that the rejection of claims 6 and 7 are made under 35 U.S.C. §102 as being anticipated by Hibbs et al. It is further noted that rejection of claims 8 - 12 are still rejected under 35 U.S.C. §103 as being unpatentable over Hibbs et al. but now in view of Bentley, as opposed to Davis which has now been withdrawn. These grounds of rejection are respectfully traversed in view of the remarks below.

With regard to Hibbs et al., which is the only reference that has been continuously cited by the Examiner throughout the prosecution history of this application, an exposure monitor mask structure is disclosed with a nine-region design, each region having a width of 0.4 microns, except the center region which has a width of 0.8 microns, and each region on either side of the center having a pitch of 0.4 microns (see column 3, lines 55-63, and Figure 1 in Hibbs et al.). Hibbs et al. further discloses the pitch to be below the resolution of a lithographic exposure tool in order to produce a single, broad, diffuse line (see column 3, line 66 - column 4, line 5, and Figure 1 in Hibbs et al.). Hibbs et al. fails to teach or suggest a plurality of sub-fields or respective sub-fields having a *progression of image feature size and pitch*, as recited in claim 6 of the present invention. This is because Hibbs et al. specifically teaches each region to be of equal width and each region having a single feature and particular space. There is no progression much less “encompassing” the spatial resolution of the imaging system, regardless of the construction placed upon Hibbs et al. by the Examiner as discussed in detail in previous responses: if the regions 14, 84 of Hibbs et al. are construed as sub-fields, there is no plurality of features therein and pitch of feature is meaningless; if Figure 1 is construed as a sub-field, there is no suggestion of using a plurality of them much less having different respective pitches.

Although Figure 1 in Hibbs et al. appears to show a growing progression in the size of space between each line 12 as it moves further away from the center 16, the *pitch* is the same size. As Hibbs et al. notes, “**as one skilled in the art will know**, pitch is the sum of a line and its adjacent space” (see column 3, lines 62-63 in Hibbs et al., emphasis added). It is clearly

shown in Figure 1, and explicitly stated at column 3, lines 55+, that the sum of a line and its adjacent space is consistently measured at 0.4 microns, except at the center where it is doubled to 0.8 microns. Therefore, although the "line-to-space ratio" appears to progress, as noted by the Examiner (see paragraph 2 of the Office Action), the *pitch remains constant*. Accordingly, the rejection of claims 6 and 7 based on Hibbs et al. under 35 U.S.C. §102, is clearly improper and fails to *prima facie* demonstrate the subject matter of the claims to be anticipated by Hibbs et al. Furthermore, it is improper for the Examiner to ignore or accord no weight to Moire' patterns recited in the claim preamble since the production of Moire' patterns when the claimed target is used is supported by the recitation that the progression of pitches of respective sub-fields comprehends the resolution referred to the focal plane, which the Examiner has not answered with teachings of prior art.

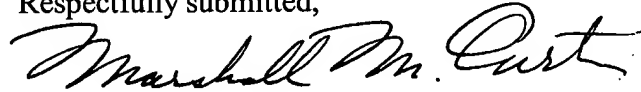
With regard to claims 8 - 12, the Examiner newly cites Bentley as teaching a compound optical-sensor system for visually observing and a photo electrically sensing coded indicia, wherein the coded indicia are imaged on an aperture of a mask (see paragraph 4 of the Office Action). Bentley describes an optical-sensor system capable of reducing the bright area surrounding a bar code being scanned so that the bar code can be accurately identified (see column 1, lines 57-61, in Bentley). While Bentley may teach a system for "sensing coded indicia", it does not teach the indicia to represent resolution as recited in claims 8, 9 and 12 or be a human readable number, as required by claims 10 and 11 of the present invention. Furthermore, the Bentley system is not used in connection with measuring the resolution of an imaging system. Therefore, it would not be obvious to one skilled in the art to combine the Bentley system with the calibration of grey scale exposure for lithography in Hibbs et al. Moreover, the system of Bentley is not compatible with the calibration of grey scale exposure for lithography in Hibbs et al. and the proposed modification of Hibbs et al. would be improper under *In re Gordon*, 221 U.S.P.Q. 1125 (1984), since operation in the intended manner would be precluded. Even if properly combined with Hibbs et al., Bentley does not mitigate any of the clear deficiencies of Hibbs et al. to answer the explicit recitation of the claims as pointed out in detail above and in previous responses.

Accordingly, it is respectfully submitted that none of the references cited by the Examiner, either alone or in combination, teach nor suggest the system contemplated by the present invention and the rejection of claims 6 - 12 is clearly in error and untenable. Therefore, reconsideration and withdrawal of the rejections under 35 U.S.C. §102 and §103 of claims 6 - 12, and the allowance of the application are respectfully requested.

Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Marshall M. Curtis". The signature is fluid and cursive, with the first name "Marshall" being the most prominent part.

Marshall M. Curtis  
Reg. No. 33,138

Whitham, Curtis & Christofferson, P. C.  
11491 Sunset Hills Road, Suite 340  
Reston, Virginia 20190

(703) 787-9400  
Customer Number: **30743**